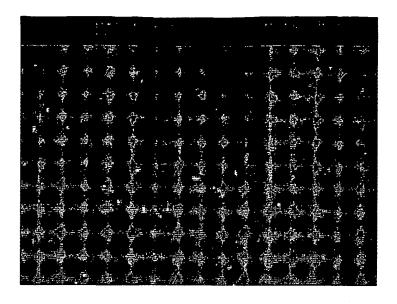
Inventor: BELL et al. Docket No.: 13353.0028USWO Title: WEAR RESISTANT POLYMERS

Attorney Name: Brian H. Batzli Phone No.: 612.336.4755 Sheet 1 of 5

 $(a) \times 1.0K$



(b) \times 6.0K

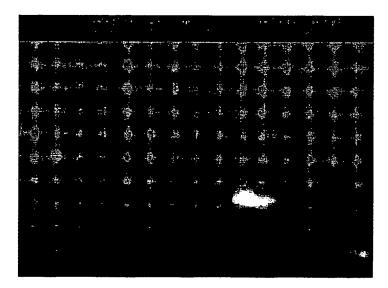
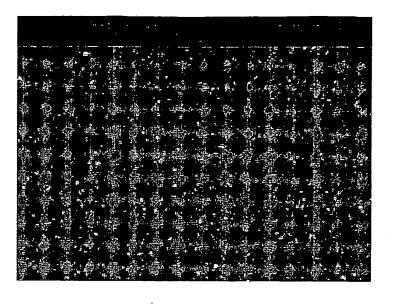


Figure 1: SEM micrograph of the surface of polyurethane containing 6.1wt% alumina prepared via the solvent method.

 $(a) \times 1.0K$

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$(b) \times 6.0K$ 5

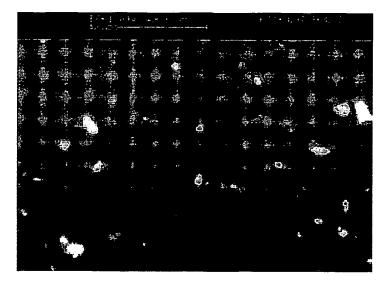


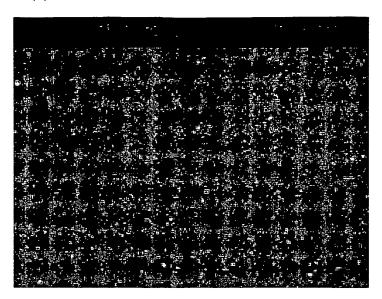
Figure 2: SEM micrograph of the surface of polyurethane containing 6.1wt% SiC prepared via the solvent method.

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 $(a) \times 1.0K$



(b) \times 6.0K

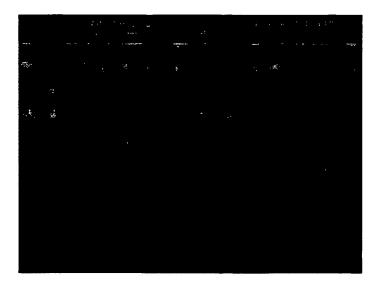


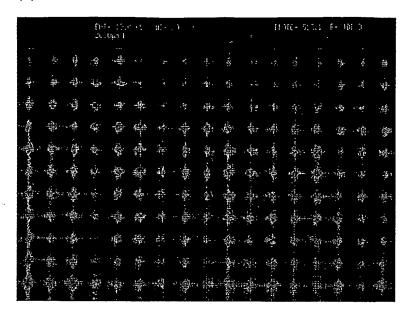
Figure 3: SEM micrograph of the surface of polyurethane containing 20.5 % SiC prepared via the solvent method.

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 $(a) \times 2.0K$



 $(b) \times 5.0K$

5

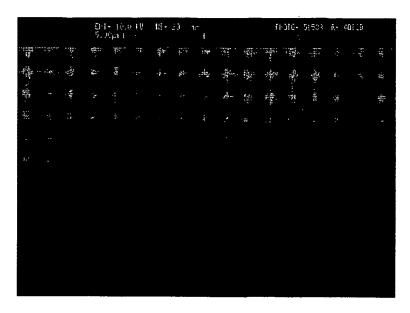


Figure 4: SEM micrograph of the surface of polyurethane containing 1.3wt% alumina prepared via the non-solvent method.

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Illustration of poor dispersion:

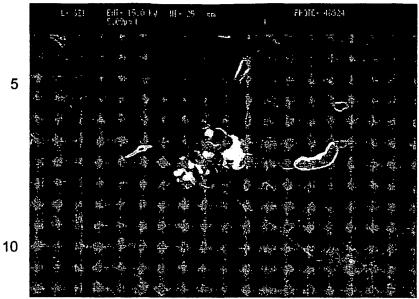


Figure 5: Secondary emission scanning electron micrograph of poorly dispersed alumina particles. In centre is an agglomerate $3\mu m$ in size composed of agglomerated $0.72~\mu m$ particles.

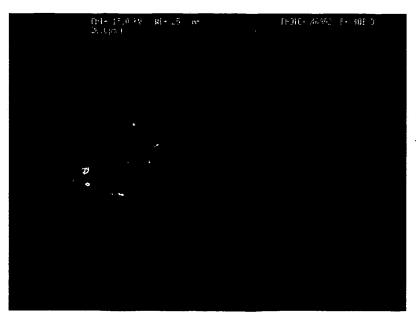


Figure 6: Secondary emission scanning electron micrograph of poorly dispersed alumina particles. In centre is an agglomerate 20μm in size composed of agglomerated 0.72 μm particles.